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PATENT APPLICATION

EXPEDITED PROCEDURE TECHNOLOGY CENTER ART UNIT 2176

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Makoto SANO et al.

Group Art Unit: 2176

Application No.: 09/215,555

Examiner:

R. Singh

Filed: December 18, 1998

Docket No.:

102382

For:

IMAGE PROCESSING APPARATUS, OUTPUT APPARATUS, IMAGE

PROCESSING SYSTEM AND IMAGE PROCESSING METHOD

REQUEST FOR RECONSIDERATION

RECEIVED

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Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Technology Center 2100

Sir:

In reply to the July 16, 2003 Office Action, reconsideration of the above-identified application is respectfully requested.

Claims 1-11 and 13-16 are pending in this application.

I. The Claims Define Patentable Subject Matter

The Office Action rejects claims 1-6, 8-10 and 16 under 35 U.S.C. §103(a) as being unpatentable over Dennis et al. (hereinafter "Dennis"), U.S. Patent No. 5,588,095. The rejection is respectfully traversed.

Applicants' invention of claim 1 relates to an image processing apparatus having reconstruction means for reconstructing print data for instructing contents of objects positioned in one page and band units that are obtained by dividing the page into a plurality of

regions, converting means for converting the data reconstructed by the reconstructing means into page description language data that is in a page description language form, and transmitting means for transmitting the page description language data, wherein the reconstructing means processes and distinguishes print data according to a type of the print data, and decides whether the band units to be reconstructed have common data.

Dennis, on the other hand, discloses processing the metafile and converting all print objects, including different shapes and graphical objects into bandable print images for the entire page, rather than processing and distinguishing the print data according to a type of print data, and decides whether the band units to be reconstructed have common data.

Further, on page 3, the Office Action states "it would have been obvious to one of ordinary skill in the art at the time of the invention to select a predetermined method of reconstruction since it was common at the time for print data to consist of various types of data such as text and graphic objects as taught by Dennis." However, it is respectfully submitted that the Examiner improperly maintained her reliance on the "per se" rule. In particular, the Examiner indisputably bears the initial burden of prima facie obviousness (MPEP §2142). To establish a prima facie case of obviousness, the Examiner must establish three things. First, there must be some suggestion or motivation, in either the references themselves or in the knowledge generally available to one skilled in the art, to modify the reference or to combine the reference teachings. Second, the Examiner must show that there is a reasonable expectation of success in combining or modifying the references. Third, the Examiner must show that the prior art reference or references, or asserted teachings, teach or suggest all of the claim features in the rejected claims (MPEP §2143). However, it is respectfully submitted that the Examiner has merely applied Dennis to reject the claims, and stated that it would have been obvious to one of ordinary skill in the art. Accordingly, it is respectfully submitted that all the features are not expressly disclosed and Dennis does not

disclose or teach all of the features recited in claim 1. That is, Dennis fails to disclose or teach the reconstruction means which decides whether the band units to be reconstructed have common data.

Further, on page 9, the Office Action states that "Dennis suggests taking into consideration "overlapping" objects. In reference to Fig. 3, Dennis teaches transmitting a list of bandable primitives for the entire page. Objects that cross band boundaries are divided at the band boundaries. The objects are taken in the order they are created and overlapping objects are defined by previous objects." However, it is respectfully submitted that Dennis only discloses converting the "overlapping" objects, but never takes into consideration the band units with common data, as described in Applicants' invention. In fact, Dennis specifically teaches away from the claimed invention because Dennis discloses "... create bitmap data for first object 108 ... and ignore all data that falls outside band 102" (col. 5, lines 27-39). Further, Dennis also discloses "... band divider of the present invention divides the first object 108 into object 108a ... within the band 102 ..." (col. 6, lines 10-14). Thus, Dennis clearly shows that Dennis never takes the band units with common data into consideration. Therefore, it is impossible for Dennis to disclose or teach the reconstruction means which decides whether the band units have common data. Thus, the Examiner relied on the broad statement of obviousness without citing or showing any reference disclosing or suggesting the specific feature of the reconstructing means.

Further, the Examiner asserts that it would have been obvious to modify Dennis to come up with the features of the claimed invention. In particular, on page 3, the Office Action states that "it would have been obvious to one of ordinary skill in the art at the time to incorporate a reconstructing, converting, and transmitting means in regards to print data since it was well-known in the art to convert page data into a PDL format and transmit it to the printer." However, the mere fact that a reference can be modified does not make the resulting

modification obvious unless the prior art also suggests the desirability of the modification.

In re Mills, 916 F2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Accordingly, none of the applied references disclose nor suggest having the reconstructing means or the desirability to have the reconstruction means.

Further, the Examiner's assertion that one of ordinary skill in the art would have known to incorporate a reconstructing, converting, and transmitting means in regards to print data does not satisfy the Examiner's burden of proving obviousness. The mere fact that the claimed invention is within the capability of one of ordinary skill in the art is not sufficient, by itself, to establish *prima facie* obviousness (MPEP §2143.01). Accordingly, the mere assertion by the Examiner that one skilled in the art could have incorporated reconstructing, converting, and transmitting means because it was well-known in the art to convert page data into a PDL format and transmit it to the printer, is insufficient to base an obviousness rejection under 35 U.S.C. §103(a).

In item 6, on page 7 of the Office Action, claim 7 was rejected under 35 U.S.C. §103(a) as being obvious over Dennis in view of U.S. Patent No. 5,859,956 to Sugiyama et al. (hereinafter "Sugiyama"). The rejection is respectfully traversed.

As discussed above, Dennis neither discloses nor suggests Applicants' claimed invention as found in claim 1, the independent claim from which the rejected claim depends. Sugiyama fails to overcome the noted deficiencies of Dennis. Thus, it is respectfully requested the rejection be withdrawn.

In item 7, on page 7 of the Office Action, claims 11-15 were rejected under 35 U.S.C. §103(a) as being obvious over Dennis in view of U.S. Patent No. 5,805,174 to Ramchandran. The rejection is respectfully traversed.

Dennis and Ramchandran, individually or in combination, fail to disclose or suggest the raster converting means clips the raster data which allows the overflow of the band units to supply the raster data to the buffer, as recited in claim 13.

The Office Action, on page 10, states that Ramchandran discloses a method in which raster data is clipped to meet certain vertical and horizontal boundaries in the buffer. However, it is respectfully submitted that Ramchandran does not disclose or teach clipping raster data which allows the overflow of the band units because Dennis discloses that any object that crosses into another object is split into a sub-object that is clipped to the zone limits (col. 6, lines 33-35). Accordingly, Dennis never cures this deficiency because Dennis discloses that the band divider divides the first object 108 into object 108a within the band 102 (col. 6, lines 10-14), as similarly stated above.

Further, in each applied reference, there is no mention of clipping raster data which allows the overflow of the band units. Therefore, there is no motivation to include the raster converting means clipping the raster data which allows the overflow of the band units to supply the raster data to the buffer.

Moreover, even if one were to combine the references, one would still fail to arrive at the claimed invention according to claim 13, because each of the applied references fail to disclose or teach clipping raster data which allows the overflow of the band units.

For at least these reasons, Applicants respectfully submit that Dennis, Sugiyama or Ramchandran, individually or in combination, fail to disclose or render obvious the features recited in independent claims 1 and 13-16. Claims 2-11, which depend from independent claim 1 are likewise distinguished over the applied art for at least the reasons discussed, as well as for the additional features they recite. Reconsideration and withdrawal of the rejection under 35 U.S.C. §103 are respectfully requested.

II. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-11 and 13-16 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

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Respectfully submitted,

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Date: October 16, 2003

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